MAT 239 (Differential Equations)  
Syllabus for Fall 2003  
1:50 - 2:40 in AMB 148

Instructor Information
Instructor: Jim Swift  Adel Math Bldg. 110  523-6878  Jim.Swift@NAU.edu

Office Hours: MTWF 10:00 - 11:15. If these times are inconvenient, you can make an appointment, or drop by my office any time.

Websites: http://math.nau.edu/~jws/classes/ has my instructor information and a link to the home page for this class. There is also a link to official U.S. time, http://www.time.gov, that our class will observe.

Course Description

Prerequisite: A grade of C or better in MAT 137 (Calculus II), and concurrent enrollment (or a grade of C or better) in MAT 238 (Calculus III).

Content: Introduction (Chapter 1), First Order Differential Equations (2), Second Order Linear Equations (3), Higher Order Linear Equations (4), Series Solutions (5), and Systems of First Order Linear Equations (7). If time permits, we will do some of Chapter 9. I will not cover Laplace transforms (6), the subject of MAT 331. Several sections in the chapters mentioned will be skipped. The class website has a tentative schedule showing what sections we will cover.

Basis of Evaluation
Class Points: There are 700 class points (715 including extra credit). Letter grades are assigned with the scale 90% = A, 80% = B, 70% = C, and 60% = D.

Homework: (150 class points.) It is necessary to practice math to learn it. I will assign lots of homework and collect it. A few problems will be graded and you will get a score for each assignment. These are not “class points.” At each of the three exams, I will add up the homework scores and convert the sum to 50 class points. You are allowed and encouraged to work together on homework.

In exceptional circumstances, I will give permission to turn in homework late. When you turn in late homework you must get it initialed by me.

Midterms: (3 × 100 class points) There will be 3 midterm exams. The third midterm is scheduled for the Wednesday before Thanksgiving. You will be able to take the exam early, on Tuesday from 3:00 to 3:50.

Final Exam: (250 class points) The Final Exam will be comprehensive. It will be Wednesday, December 10, from 12:30 to 2:30 in our usual classroom.

Extra Credit: (15 class points) On each midterm exam I will give you 3 extra credit class points if you had no unexcused absences since the previous exam, and I will give you 2 points if you you turned in all the homework leading up to that exam. I will give excused absences for institutional excuses, and for exceptional circumstances at my discretion. If you are late I may count you absent.